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PF-0229 US

What is claimed is:

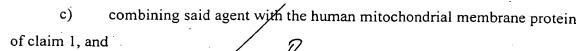
- 1. A substantially purified human mitochondrial membrane protein comprising the amino acid sequence of SEQ ID NO:1 or tragments thereof.
- An isolated and purified polynucleotide sequence encoding the human mitochondrial membrane protein of claim 1.
- 3. A polynucleotide sequence which hybridizes under stringent conditions to the polynucleotide sequence of claim 2.
 - 4. A hybridization probe comprising the polynucleotide sequence of claim 2.
- 5. An isolated and purified polynucleotide sequence comprising SEQ ID NO:2 or variants thereof.
 - 6. A polynucleotide sequence which is complementary to the polynucleotide sequence of claim 2 or variants thereof.
 - 7. A hybridization probe comprising the polynucleotide sequence of claim 6.
 - 8. An expression vector containing the polynucleotide sequence of claim 2.
 - 9. A host cell containing the vector of claim 8.
 - 10. A method for producing a polypeptide comprising the amino acid sequence of SEQ ID NO:1 the method comprising the steps of:
 - a) culturing the host cell of claim 9 under conditions suitable for the expression of the polypeptide; and
 - b) recovering the polypeptide from the host cell culture.

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- 11. A purified antibody which binds specifically to the polypeptide of claim 1.
- 12. A purified antagonist which specifically binds to and modulates the activity of the polypeptide of claim 1.
 - 13. A method for treating cancer comprising administering to a subject in need of such treatment an effective amount of the antagonist of claim 12.
 - 14. A method for detecting a polynucleotide encoding human mitochondrial membrane protein in a biological sample comprising the steps of:
 - a) hybridizing the polynucle of claim 6 to nucleic acid material of a biological sample, thereby forming a hybridization complex; and
 - b) detecting said hybridization complex, wherein the presence of said complex correlates with the presence of a polynucleotide encoding human mitochondrial membrane protein in said biological) sample.
 - 15. A method for identifying a specific antifungal agent, the method comprising:
 - a) combining at least one agent with a fungal TIM17,
 - b) identifying an agent which binds to the fungal TIM17,
 - c) combining the agent with the human mitochondrial membrane protein of claim 1, and
 - d) determining that the agent does not bind to the human mitochondrial membrane protein, thereby identifying the agent with antifungal specificity.
 - 16. A method for identifying a specific antiprotozoal agent, the method comprising:
 - a) combining at least one agent with a protozoal TIM17,
 - b) identifying an agent which binds to the protozoal TIM17,

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d) determining that said agent does not bind to the human mitochondrial membrane protein, thereby identifying the agent with antiprotozoal specificity.